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ABSTRACT

This document contains validated activities and competencies needed by information professionals working in an information service company. The activities and competencies are organized according to the functions which information professionals in such companies perform: project management; reference/analysis of secondary data; research, analysis, and design; marketing; and organization/management support. Within each function, competencies are grouped under the categories of Knowledge, Skills, and Attitudes, and three professional levels are dealt with: entry level (0-3 years experience), mid-level (4-9 years experience), and senior level (10 or more years experience). (THC)

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NEW DIRECTIONS IN LIBRARY AND INFORMATION SCIENCE EDUCATION
FINAL REPORT
VOLUME 2.11
INFORMATION SERVICE COMPANY PROFESSIONAL COMPETENCIES

1984

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INTRODUCTION

This document contains validated activities and competencies needed by information professionals working in an information service company. The following operational definition of competency was developed:

> **A competency is a generic knowledge, skill or attitude of a person that is causally related to effective behavior as demonstrated through external performance criteria, where:**
>
> - **Knowledge is having information about, knowing, understanding, being acquainted with, being aware of, having experience of, or being familiar with something, someone, or how to do something.**
> - **Skill is the ability to use one's knowledge effectively.**
> - **Attitude is a mental or emotional approach to something, or someone.**

We have identified several types of knowledge that are necessary to perform information work satisfactorily as follows:

- Basic knowledge in such areas as language, communication, arithmetic operations, etc.
- Subject knowledge of primary subject fields of users served such as medicine, chemistry, law, etc.
- Library and information work environments such as the information community, its participants and their social, economic and technical interrelationships, etc.
- Knowledge of what work is done such as the activities required to provide services and produce products, etc.
- Knowledge of the organization or user community served such as the mission, goals, and objectives of the user or the organization, user's information needs and requirements, etc.

There appear to be three kinds of skills necessary to perform information work satisfactorily including:

- Basic skills such as cognitive, communication, analytical, etc.
- Skills related to each specific activity being performed such as negotiation of reference questions, evaluation of search outputs, etc.
- Other skills such as managing time effectively, budgeting and making projections, etc.

Attitudes of information professionals are found to be extremely important to work performance. We have found it useful to subdivide attitudes into:

- Dispositional attitudes toward one's profession, the organization served, one's work organization, and other people such as users and co-workers.
- Personality traits/qualities such as confidence, inquisitiveness, sense of ethics, flexibility, etc.
- Attitudes related to job/work/organization such as willingness to accept responsibility, willingness to learn, desire to grow, etc.

The activities and competencies are organized according to the functions which information professionals perform, and by professional level as displayed in Figure 1. The competencies are cumulative across professional level, i.e., competencies of mid-level professionals include entries shown at the mid-level as well as those at the entry level, etc.

It is important to understand the distinction between functions performed and positions or job titles. Our rationale behind the functional approach was that we were more concerned with what information professionals do than with what they are called. In a single-person unit, therefore, the information professional will undoubtedly perform more than a single function. In using and interpreting the competency data in this document, it is important to consider the functions being performed by

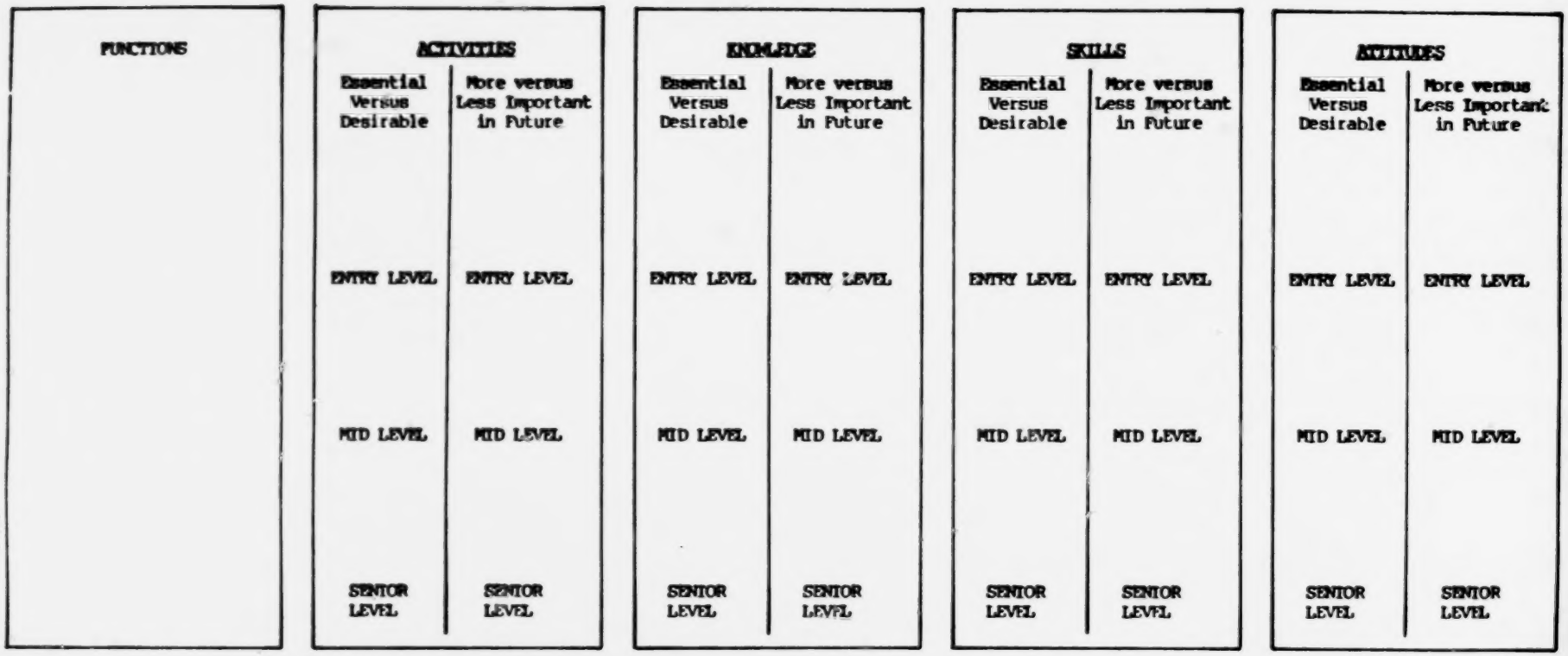

Figure 1 Organization of Activities and Competencies

professionals and the activities being performed to determine which competencies are appropriate. The functions identified for information professionals working in information service companies are:

- project management
- reference/analysis of secondary data
- research, analysis and design
- marketing
- organization/management support.

Three professional levels were defined as follows:

- entry level (up to 3 years of professional experience)
- mid level (4-9 years of professional experience)
- senior level (10 or more years of professional experience).

The activities performed are listed first and numbered sequentially. The actual assignment of individual activities to subcategories of the major activities and to the functions varies from one worksetting to another. The organization of activities that we developed provided us with the "best fit" case. Indented and unnumbered activities are essentially paraprofessional activities which, in small organizations, may be performed by professionals.

INFORMATION SERVICE COMPANY PROFESSIONAL COMPETENCIES

PROJECT MANAGEMENT

PROJECT MANAGEMENT — ENTRY LEVEL

Planning and Control of Current Projects

1. Attend and participate in project team meetings
2. Work as part of the project team to identify the primary and secondary data to be gathered and analyzed to support a project to plan, design, develop and/or evaluate systems, services, products, policies, and/or facilities
3. Work with mid level staff in preparing detailed project plans for project support activities; revise plans, as required, following review by project director
4. Assist/work with project consultants, as assigned
5. Throughout the course of the project, make recommendations to the project director regarding project plans and activities, as appropriate; suggest performance of additional activities beyond the scope of the original contract
6. Notify the project director of any problems encountered in working on a project
7. Keep a detailed record of all costs incurred for each project; prepare a monthly report of costs for administrative staff with copies for the appropriate project director(s)
8. Maintain a daily time record of project-related activities; analyze these on a monthly basis and prepare a monthly report for administrative staff with copies for the appropriate project director(s)
9. Draft sections of monthly, final and other project reports, as assigned
10. Assist in preparing summaries of data (written and graphic) to support project meetings with clients, seminars, workshops, etc.
11. Attend and participate in project meetings with clients, seminars, workshops, etc., as indicated by the project director
12. Supervise mailing/delivery of all project reports, survey forms and other project-related deliverables within established time schedules

PROJECT MANAGEMENT — ENTRY LEVEL

Planning and Control of Potential Projects

13. Submit project ideas to senior staff for development as unsolicited proposals or grant applications

14. Identify potential sources of project funding; submit information to senior staff for review, action and/or inclusion in the master information file

15. Attend and participate in proposal/grant application planning meetings

16. Draft sections of proposals (solicited and unsolicited) and grant applications, as assigned

PROJECT MANAGEMENT — MID LEVEL

Planning and Control of Current Projects

17. Develop a basic outline of project requirements from careful review of the accepted proposal and the respective request for proposal

18. Conduct meetings of sub-groups of the project team

19. Coordinate and participate in the preparation and revision, if required, of detailed project plans for project support activities

20. Review the project schedule as submitted in the accepted proposal; include calendar dates for all milestones and deliverables; establish projected in-house dates for completion of each project requirement, subject to approval by the project director

21. Arrange for and coordinate the project-related activities of sub-contractors and/or other organizational units which provide support services (word processing, data processing, graphic design, printing, temporary staffing, audiovisual services, etc.)

22. Review and verify supplier billing/charging information

23. Work with summary figures supplied by administrative staff to compile the monthly costs (manpower, services, equipment, etc.) incurred for each project and compare with the budgeted costs; prepare draft monthly reports for the respective project directors

24. Supervise the production of all project reports, survey forms and other project-related deliverables within established time schedules

PROJECT MANAGEMENT — MID LEVEL

Planning and Control of Current Projects (cont'd)

25. Function as assistant to the project director on large-scale, complex projects; resolve minor problems and respond to client's and project participants' questions as assigned by the project director

26. Function as project director for smaller, less complex projects

27. Coordinate all phases of seminar and workshop preparation, including publicity, applicant selection, site selection and arrangements, on-site organization and post-workshop activities

Planning and Control of Potential Projects

28. Develop detailed outlines for proposals (solicited and unsolicited) and grant applications based on discussions at planning meetings and documentation (requests for proposals, grant application guidelines, etc.) issued by the sponsoring and/or funding organizations

29. Revise proposal outlines following review by appropriate senior staff

30. Coordinate and participate in drafting proposals and grant applications based on approved outlines

31. Revise drafts of proposals/grant applications as recommended by senior staff

32. Supervise the production and mailing/delivery of all proposals/grant applications within established time schedules

PROJECT MANAGEMENT — SENIOR LEVEL

Planning and Control of Current Projects

33. Function as project director and principal researcher for large-scale, complex projects

34. Coordinate and manage both internal and external research projects

35. Set up a kickoff meeting with the appropriate representatives of the funding and/or sponsoring organization in order to get acquainted and to resolve any questions which either side may have

36. Review and modify/approve the basic outline of project requirements prepared by mid level staff

PROJECT MANAGEMENT — SENIOR LEVEL

Planning and Control of Current Projects (cont'd)

37. Review and modify/approve the project calendar prepared by mid level staff

38. Review and modify/approve detailed project plans for project support activities prepared by mid level staff

39. Conduct project team meetings and maintain effective communication with the team and its individual members

40. Organize the project team by developing lines of authority, responsibility and accountability

41. Review with the project team the goals, objectives, policies, and procedures for conducting each project

42. Lead, motivate and supervise the project team

43. Train project team members to perform specific tasks, as required

44. Anticipate, minimize and manage conflicts which may arise among project team members

45. Act as decision-maker and problem-solver among project team members, as required

46. Assign specific tasks to project consultants

47. Work with, or designate specific project team member(s) to work with the client's representatives throughout the course of a project, as required

48. Plan and conduct meetings of project advisory groups

49. Assimilate information obtained from advisors and from the project team in order to further direct in-depth research efforts

50. Monitor and measure the progress of the project by tracking and controlling the schedule, costs and resources; formally request additional time and/or money to complete the project, if required

51. Evaluate the performance of team members in completing the various tasks in a project

52. Identify problems/discrepancies in conducting a project and take corrective action

PROJECT MANAGEMENT — SENIOR LEVEL

Planning and Control of Current Projects (cont'd)

53. Review and approve/modify all portions of project deliverables and other materials prepared by the project team

54. Prepare the final report for each project with assistance from the project team

55. Coordinate the revision of the final report, if required

56. Monitor the production and mailing/delivery of all project deliverables and other materials to support project meetings, workshops and seminars

57. Plan and conduct meetings with client's representatives, as required

58. Plan and conduct seminars and workshops

59. Encourage brainstorming by the project team and others to identify additional products which may be generated from project-related activities

60. Recommend add-ons to current projects; supervise all activities required to formally effect and support changes in the scope of existing contracts or grants

Planning and Control of Potential Projects

61. Establish and maintain/contact with organizations which regularly fund projects and/or grants in subject areas in which the organization has expertise

62. Monitor current information-related research; recommend ways to develop future business activities and services for the information community as unsolicited proposals

63. Work with prospective clients toward development of operational projects/services to be funded as unsolicited proposals

64. Identify titles/items for acquisitiion which advertise available projects and grants

65. Review documentation/verbal reports on requests for proposals, available grants and other ideas which could be developed as unsolicited proposals

66. Select which potential projects deserve more in-depth review

67. Request/supervise the request for official documentation on specific requests for proposals and grant applications

PROJECT MANAGEMENT — SENIOR LEVEL

Planning and Control of Potential Projects (cont'd)

68. Review official documentation; recommend specific action based on likelihood of award and current obligations of staff

69. Meet with other senior staff and management to determine which potential projects to pursue, who will coordinate the proposal writing, who will serve as project director, and what the basic conceptual approach and project staffing will be

70. Contact the appropriate staff person at the sponsoring and/or funding organization for clarification of requirements, if necessary; attend pre-bid conferences when notified

71. Develop the basic project plan and specific staffing requirements

72. Develop the project schedule and the in-house schedule for submitting the proposal/grant application

73. Contact potential sub-contractors, project consultants and advisory group members; obtain necessary formal commitments of support if project/grant is awarded

74. Develop the project budget

75. Conduct a project planning meeting with designated members of the project team

76. Assign appropriate mid level staff to develop detailed outlines for proposals and grant applications

77. Review detailed outlines and recommend appropriate revisions

78. Review drafts of proposals/grant applications prepared by junior staff

79. Prepare the final version of proposals/grant applications

80. Monitor the production and mailing delivery of all proposals/grant applications

81. If project/grant award is received, sign all official documents as project director

82. When appropriate, assist management in taking the necessary action to contest contract/grant award to another organization

PROJECT MANAGEMENT — ENTRY LEVEL

Basic knowledge

knowledge related to literacy, numeracy, communications, etc.

Subject knowledge

knowledge of the primary subject field of clients served (e.g., librarianship, education, medicine, chemistry, law, etc.)
knowledge of foreign languages

Information Science Knowledge (Generic)

knowledge of definition, structure, and formats of information
knowledge of alternative approaches to the organization of information
knowledge of alternative approaches to retrieval of information
knowledge of alternative approaches to information management
knowledge of available and emerging information technologies and their applications
knowledge of completed and ongoing research in the field and its applicability to practice
knowledge of career opportunities
knowledge of how to learn on an ongoing basis

Knowledge about information work environments

knowledge of the expanding information community, its participants and their interrelationships (social, economic, technical, etc.)
knowledge of the variety of work settings and their organizational structures
knowledge of the functions performed within the various work settings and the services and products offered
knowledge of the users of the services and products, their characteristics and information habits

Knowledge of what work is done

knowledge of the functions related to research analysis and design of information and information systems
knowledge of the project management functions, the range of services and products offered (both actual and potential)
knowledge of the goals and objectives of each project
knowledge of the activities that are required to support research, to offer the services and produce the products
knowledge of the various resources that are necessary to support the activities
knowledge of research, analysis and design tools

PROJECT MANAGEMENT — ENTRY LEVEL

Knowledge of what work is done (cont'd)

knowledge of research, analysis and design methods and techniques
knowledge of project management tools
knowledge of project management methods and techniques
knowledge of job responsibilities
knowledge of performance expected and how it can be measured

Knowledge of how to do work

knowledge of how to perform the various activities
knowledge of how to use the research, analysis and design tools
knowledge of how to apply the research, analysis and design methods and techniques
knowledge of how to use the project management tools
knowledge of how to apply the project management methods and techniques

Knowledge of the organization and specific work unit

knowledge of the mission, goals and objectives of the organization
knowledge of the structure of the organization and the role of the section within the organization
knowledge of the various projects and key personnel within the organization
knowledge of the policies and procedures relevant to project management operations
knowledge of the various resources available within the organization (e.g., personnel, equipment, etc.)

PROJECT MANAGEMENT — MID LEVEL

greater depths of knowledge specified above
knowledge of the operations of other sections in the organization and how they relate to project management
knowledge of available vendor-supplied systems, services and products to support project management and to support specific projects
knowledge of the contracting process, both in general and within the organization
knowledge of evaluation methods and techniques to evaluate systems, services and products

PROJECT MANAGEMENT	SENIOR LEVEL

greater depths of knowledge specified above
knowledge of public relations techniques
knowledge of techniques for teaching/training members of the project team to perform specific tasks
knowledge of statistical description, analysis, interpretation and presentation
knowledge of the costs associated with resources (materials, personnel, space, etc.)
knowledge of cost analysis and interpretation methods
knowledge of pricing methods
knowledge of value assessment methods
knowledge of methods of resource allocation
thorough knowledge of various computer-related technologies, database and retrieval system structures, and basic programming vocabularies
state-of-the-art knowledge of research and practice in techniques for research, analysis and design of information and information systems
state-of-the-art knowledge of research and practice in project management techniques

PROJECT MANAGEMENT — ENTRY LEVEL

Basic Skills

literacy, numeracy, cognitive, analytical, communications, etc.

Skills Related to Specific Activities

Ability to:

perform each activity
use and interface with users of computer/microcomputer, telecommunications and other new equipment/technologies
perceive the needs of the client
establish rapport with colleagues and clients
communicate well by written, verbal and non-verbal means
listen carefully
think and argue logically
collect, analyze and interpret data
make decisions and recommendations based on available information
work independently and in groups
develop criteria for evaluation
make effective, timely, and well-informed decisions
isolate and define problems and develop the necessary criteria and action for their solution
manage time effectively
work under pressure of strict deadlines
endure the stress of traveling and irregular work hours
stay organized while working on several projects at the same time
extract those aspects of a project which are not environment-specific and transfer them to related projects
supervise staff

PROJECT MANAGEMENT — MID LEVEL

Skills Related to Each Specific Activity

Skills listed above are developed to a greater extent

Ability to:

communicate with data processing staff and other support/contract staff on a technical level
arbitrate and negotiate with contractors
conduct meetings with individuals and groups

PROJECT MANAGEMENT — SENIOR LEVEL

Skills listed above are developed to a greater extent

Ability to:

develop realistic project plans and cost estimates
assemble appropriate staff and consultants for each project team
anticipate long-range needs of the organization and the effect of these needs on the project team and other organizational resources
plan and schedule activities effectively
lead and motivate the individual members of the project team
train members of the project team
design systems and procedures to improve operations of the project team, of the organization, and for clients
apply methods of measurement and evaluation
budget and make projections
optimize the use of organizational and project team resources
anticipate long-range needs of the client
make recommendations to clients with confidence
present salient features of project reports to clients' representatives who may or may not be technically knowledgeable
discern the real situation facing clients
remain calm when recommendations, findings, etc. are questioned
justify recommendations, methodologies, etc.

PROJECT MANAGEMENT

Dispositional Attitudes

Attitudes Toward Institutions

Respect for profession
Respect for the section
Respect for the parent organization

Attitudes Toward Other People

Toward Users

Respect users
Like people in general
Like to help people
Like to meet people
Like to make others feel comfortable
Sensitive to others' needs

Toward Others in the Workplace

Respect co-workers
Like to work with others/as a team
Like to work on own
Willingness to draw upon and share knowledge and experience with others
Supportive of co-workers
Enjoy managing/supervising others

Personal Qualities

Alertness
Assertiveness
Compassion/Kindness
Confidence
Cheerfulness
Dependability
Determination/Tenacity
Diplomacy
Emotional stability
Fairness
Flexibility/Versatility
Imagination
Inquisitiveness
Leadership ability

PROJECT MANAGEMENT

Personal Qualities (cont'd)

- Neatness
- Need for achievement
- Objectivity
- Open-mindedness
- Optimism/Positive attitude
- Organization
- Patience
- Physical endurance
- Resourceful
- Sensitive/Thoughtful
- Sense of humor
- Sense of ethics
- Tolerance

Attitudes Related to Job/Work/Organization

Individual should demonstrate:

- Willingness to take/accept responsibility
- Willingness to take initiative
- Willingness to respond to authority, apply and follow policy
- Realization that there is no single "right" way to achieve the goals of the section/organization
- Desire to learn/try
- Willingness to fail
- Willingness to ask questions
- Desire to work to best of ability
- Responsiveness to time constraints
- Accuracy
- Willingness to get hands dirty
- Attention to detail
- Willingness to do clerical tasks
- Desire to follow-through
- Service orientation
- Organizational identity
- Willingness to promote parent organization and its services
- View of parent organization as part of a larger information environment
- Ability to see broad picture
- Ability to sacrifice short-term gains for long-term goals
- Political sense
- Curiosity
- Variety of interests
- Desire to grow personally
- Desire to grow professionally
- Desire to remain current in specific and general subject field
- Positive attitude toward job

INFORMATION SERVICE COMPANY PROFESSIONAL COMPETENCIES

REFERENCE/ANALYSIS OF SECONDARY DATA

ACTIVITIES

REFERENCE/ANALYSIS OF SECONDARY DATA	ENTRY LEVEL

1. Work with the project team to identify the specific requirements for obtaining literature (published and unpublished) and other information to support a particular project

2. Recommend obtaining data from appropriate online database services which currently are not available in-house, but which could be acquired for in-house use or could be searched by a contract service

3. Develop the strategy for obtaining, evaluating and packaging the information and data to best support project needs

4. Perform online searches using proper thesaurus terms and search techniques to retrieve the required information

5. Review retrieval output for relevancy; perform additional online searching, as required

6. Obtain additional information to support a project, as required, by performing manual literature searches, searching the in-house master information files, and by contacting professional associations, research centers and experts in the field

7. Obtain copies of documents relevant to a project by purchase, gift and/or loan

8. Review the documents and highlight/extract material of special interest to a project; write brief evaluative comments on the information contained in each document

9. Keep abreast of current developments in the field related to the various projects

10. Highlight or write short synopses of recently gathered information from formal and informal sources to support current projects and to update the in-house master information files

11. Prepare a state-of-the-art bibliography (with annotations) on project topics for inclusion in the project final report

12. Assist mid level staff in developing special information tools/packages for clients to provide access to information not readily available elsewhere

13. Document the methodology of project-related reference activities for inclusion in the project final report

REFERENCE/ANALYSIS OF SECONDARY DATA — ENTRY LEVEL

Other

14. Assist with the identification, procurement, compilation and documentation of information to support marketing, internal research activities and preparation of proposals and grant applications

15. Answer ready reference questions from in-house staff

16. Perform bibliographic verification as required

17. Translate/obtain in-house translations of titles and abstracts, as required

18. Supervise daily maintenance of the in-house master information files of systems, services, experts, organizations, equipment, events, etc. of interest to the organization.

19. Maintain a file of staff subject interest profiles to support SDI service

20. Run stored search profiles/programs at specified intervals

21. Notify staff of information added to the master information files in their particular areas of interest

22. Supervise input to the master information file of (references to) valuable data (written and graphic) generated in-house for project reports and presentations, proposals and grant applications, seminars and workshops, etc.

23. Provide assistance with the design, development and management of the in-house master information files

24. Make recommendations for more effective information development and processing in-house

25. Recommend publications/products which could be developed from information contained in the master information files

26. Recommend acquisition of reference books and standard works in subject areas of interest to the organization

27. Respond to queries about the organization's activities, projects, etc. as assigned by senior staff

ACTIVITIES

REFERENCE/ANALYSIS OF SECONDARY DATA — ENTRY LEVEL

Other (cont'd)

28. Keep abreast of new and changing reference sources, services and tools and of new and developing technologies applicable to reference searching

29. Keep current on topics of interest to the organization and/or developments in the information field in general

REFERENCE/ANALYSIS OF SECONDARY DATA — MID LEVEL

30. Assist entry level staff with any questions related to search formulation or strategy, including use of approved thesaurus terms for specific indexes and/or databases

31. Review the strategy developed by entry level staff for obtaining, evaluating and packaging the information and data to support a particular project; recommend additional strategies, sources of information and processing/packaging techniques

32. Refer major questions related to search strategy and techniques, packaging of search results and obtaining literature and other unpublished information to the project director

33. Obtain approval for and supervise acquisition of in-house or contract access to additional online database services

34. Review written evaluations of project-related literature as prepared by entry level staff; select important documents for the project director's personal review

35. Draft sections of project reports which provide state-of-the-art background information on the topic(s) under study

36. Coordinate and participate in the development of special information tools/packages for clients; revise product plans/contents as recommended by the project director

37. Arrange for in-house/contract production of publications/products developed for clients or from information contained in the master information files

38. Review/revise documentation on the methodology of project-related reference activities as prepared by entry level staff

REFERENCE/ANALYSIS OF SECONDARY DATA — MID LEVEL

Other

39. Obtain translations of foreign materials through use of contract services when in-house language expertise is not available

40. Supervise the overall design, development and management of the in-house master information files

41. Resolve questions related to inclusion of materials in the master information files

42. Review information from the master information files selected for weeding by entry level staff; refer questions to senior staff

43. Work with senior and other staff to develop/change individual subject interest profiles

44. Develop and maintain stored search profiles for SDI service for staff

45. Identify libraries, information centers and other information facilities in the local area which collect/disseminate information which supports the organization's subject interests

46. Contact these facilities to identify the services they would provide to the organization; note any costs associated with services

REFERENCE/ANALYSIS OF SECONDARY DATA — SENIOR LEVEL

47. At the initial meeting of the project team, identify the basic information required to support a particular project

48. Advise junior staff on selecting appropriate search strategies based on available resources, time constraints, costs, etc.

49. Advise junior staff of sources of unpublished literature on project-related topics

50. Approve/modify recommendations of mid level staff to acquire in-house or contract access to online databases to support particular projects

51. Resolve problems related to search strategy, search techniques and packaging of search results as referred by mid level staff

ACTIVITIES

REFERENCE/ANALYSIS OF SECONDARY DATA	SENIOR LEVEL

52. Identify experts that junior staff should contact to supply additional information to support particular projects

53. Read and evaluate important project-related literature recommended by mid level staff

54. Review annotations prepared by junior staff for all other project-related literature; request copies of selected documents for personal review, as required

55. Receive and review advance copies of soon-to-be-published works and unpublished manuscripts/papers which are on topics related to particular projects

56. Prepare draft written comments on the literature and annotations reviewed; review and revise the comments for inclusion in project reports

57. Identify the objectives and general outline of special information tools/packages to be prepared for clients

58. Review and approve/modify the specific plans for and the draft revisions of the special information tools/packages

59. Prepare executive analyses to be included in special information tools/packages prepared for clients and in any other information products prepared for publication by the organization

Other

60. At planning meetings, identify the basic information requirements needed to support marketing, internal research activities, and preparation of proposals and grant applications

61. Develop the overall design requirements for the master information files

62. Review and approve/modify detailed designs and operating procedures for the master information files as prepared by junior staff

63. Resolve problems related to any aspect of the planning, implementation, operation and maintenance of the master information files as referred by mid level staff

64. Establish and maintain contact with vendors in order to obtain up-to-date information on products and services for inclusion in the master information files

REFERENCE/ANALYSIS OF SECONDARY DATA — SENIOR LEVEL

Other (cont'd)

65. Review and approve/modify recommendations and plans prepared by junior staff for publications/products which could be developed from information contained in the master information files

66. Supervise the overall production of publications/products developed by staff from information contained in the master information files

67. Assign junior staff to respond to specific queries about the organization's activities, projects, etc.

68. Meet with managers of libraries, information centers and other information facilities serving the local area in order to make the necessary arrangements to obtain special support, when required, for the organization's information needs

REFERENCE/ANALYSIS OF SECONDARY DATA — ENTRY LEVEL

Basic knowledge

knowledge related to literacy, numeracy, communications, etc.

Subject knowledge

knowledge of the primary subject field of clients served (e.g., librarianship, education, medicine, chemistry, law, etc.)
knowledge of foreign languages

Information Science Knowledge (Generic)

knowledge of definition, structure, and formats of information
knowledge of alternative approaches to the organization of information
knowledge of alternative approaches to retrieval of information
knowledge of alternative approaches to information management
knowledge of available and emerging information technologies and their applications
knowledge of completed and ongoing research in the field and its applicability to practice
knowledge of career opportunities
knowledge of how to learn on an ongoing basis

Knowledge about information work environments

knowledge of the expanding information community, its participants and their interrelationships (social, economic, technical, etc.)
knowledge of the variety of work settings and their organizational structures
knowledge of the functions performed within the various work settings and the services and products offered
knowledge of the users of the services and products, their characteristics and information habits

Knowledge of what work is done

knowledge of the general functions related to research, analysis and design of information and information systems
knowledge of the reference and information analysis functions, the range of services and products offered (both actual and potential)
knowledge of the goals and objectives of each project
knowledge of the clients' information needs and requirements
knowledge of the activities that are required to support research, to offer the services and produce the products

REFERENCE/ANALYSIS OF SECONDARY DATA — ENTRY LEVEL

Knowledge of what work is done (cont'd)

knowledge of the various resources that are necessary to support the activities
knowledge of reference tools
knowledge of reference and information analysis methods and techniques
knowledge of job responsibilities
knowledge of performance expected and how it can be measured

Knowledge of how to do work

knowledge of how to perform the various activities
knowledge of how to use the reference tools
knowledge of how to apply the reference and information analysis methods and techniques

Knowledge of the organization and specific work unit

knowledge of the mission, goals and objectives of the organization
knowledge of the structure of the organization and the role of the section within the organization
knowledge of the various projects and key personnel within the organization
knowledge of the policies and procedures relevant to the section operations
knowledge of the various resources available within the organization (e.g. personnel, equipment, etc.)
knowledge of the information needs and requirements of in-house staff
knowledge of the organization's information collection(s) and of related collections

REFERENCE/ANALYSIS OF SECONDARY DATA — MID LEVEL

greater depths of knowledge specified above
knowledge of the operations of other sections in the organization and how they relate to reference and information analysis
knowledge of available vendor-supplied systems, services and products to support reference and information analysis
knowledge of the contracting process, both in general and within the organization
knowledge of evaluation methods and techniques to evaluate systems, services and products

greater depths of knowledge specified above
knowledge of description, analysis, interpretation and presentation of information findings
knowledge of the costs associated with resources (materials, personnel, space, etc.)
knowledge of cost analysis and interpretation methods
knowledge of methods of resource allocation
state-of-the-art knowledge of research and practice in reference and information analysis techniques

SKILLS

REFERENCE/ANALYSIS OF SECONDARY DATA — ENTRY LEVEL

Basic Skills

literacy, numeracy, cognitive, analytical, communications, etc.

Skills Related to Specific Activities

Ability to:

perform each activity
use computer and telecommunications equipment/systems with ease
perceive the information needs of the client and in-house staff
establish rapport with colleagues and experts
communicate well by written, verbal and non-verbal means
conduct an interview
listen carefully
obtain/elicit required information from informal sources
collect, analyze and interpret data
quickly extract the main points of documents/information and present them concisely
make decisions and recommendations based on available information
work independently and in groups
develop criteria for evaluation
make effective, timely, and well-informed decisions
isolate and define problems and develop the necessary criteria and action for their solution
manage time effectively
work under pressure of strict deadlines
endure the stress of irregular work hours during rush periods
stay organized while working on several projects at the same time
extract information which is not environment-specific to one project and use the information to support related projects
supervise staff

REFERENCE/ANALYSIS OF SECONDARY DATA — MID LEVEL

Skills Related to Each Specific Activity

Skills listed above are developed to a greater extent

perceive new information needs where none have been required previously
communicate with data processing staff and other support/contract staff on a technical level
arbitrate and negotiate with contractors
conduct meetings with individuals and groups

Skills listed above are developed to a greater extent

identify the information required to support each project
estimate the cost of obtaining the necessary information to support each project
anticipate long-range needs of the section and of the organization
design systems and procedures to improve operations of the section and of the organization
apply methods of measurement and evaluation
budget and make projections
optimize the use of organizational and section resources

REFERENCE/ANALYSIS OF SECONDARY DATA

Dispositional Attitudes

Attitudes Toward Institutions

Respect for profession
Respect for the section
Respect for the parent organization

Attitudes Toward Other People

Toward Users

Respect users
Like people in general
Like to help people
Like to meet people
Like to make others feel comfortable
Sensitive to others' needs

Toward Others in the Workplace

Respect co-workers
Like to work with others/as a team
Like to work on own
Willingness to draw upon and share knowledge and experience with others
Supportive of co-workers
Enjoy managing/supervising others

Personal Qualities

Alertness
Assertiveness
Compassion/Kindness
Confidence
Cheerfulness
Dependability
Determination/Tenacity
Diplomacy
Emotional stability
Fairness
Flexibility/Versatility
Imagination
Inquisitiveness
Leadership ability
Neatness
Need for achievement
Objectivity
Open-mindedness

REFERENCE/ANALYSIS OF SECONDARY DATA

Personal Qualities (cont'd)

Neatness
Need for achievement
Objectivity
Open-mindedness
Optimism/Positive attitude
Organization
Patience
Physical endurance
Resourceful
Sensitive/Thoughtful
Sense of humor
Sense of ethics
Tolerance

Attitudes Related to Job/Work/Organization

Individual should demonstrate:

Willingness to take/accept responsibility
Willingness to take initiative
Willingness to respond to authority, apply and follow policy
Realization that there is no single "right" way to achieve the goals of the section/organization
Desire to learn/try
Willingness to fail
Willingness to ask questions
Desire to work to best of ability
Responsiveness to time constraints
Accuracy
Willingness to get hands dirty
Attention to detail
Willingness to do clerical tasks
Desire to follow-through
Service orientation
Organizational identity
Willingness to promote parent organization and its services
View of parent organization as part of a larger information environment
Ability to see broad picture
Ability to sacrifice short-term gains for long-term goals
Political sense
Curiosity
Variety of interests
Desire to grow personally
Desire to grow professionally
Desire to remain current in specific and general subject field
Positive attitude toward job

INFORMATION SERVICE COMPANY PROFESSIONAL COMPETENCIES

RESEARCH, ANALYSIS AND DESIGN

ACTIVITIES

RESEARCH, ANALYSIS AND DESIGN	ENTRY LEVEL

1. Work as part of the project team to identify the specific primary data to be collected to support a particular project

2. Review project-related literature identified and annotated by reference staff in order to gain state-of-the-art knowledge of the issue(s) under study

3. Work with mid level staff to develop procedures for data collection and analysis

4. Work with mid level staff to develop draft survey forms, questionnaires, interview guides and other data collection tools to support a particular project

5. Work with mid level staff to identify the sample population, including persons to be interviewed

6. Perform the data collection operations for a trial sample of the population to be studied

7. Suggest revisions to the data collection tools, as required, based on reactions of and to the trial sample

8. Train and supervise support personnel in the use of data collection tools and techniques

9. Maintain up-to-date knowledge of the capabilities of statistical software packages available in-house or through a contractor

10. Work with mid level staff to develop coding systems to support tabulation and analysis of quantitative data

11. Train and supervise support personnel in tabulating data manually, if required, and in assisting in preliminary analysis of data tabulated manually or by computer

12. Make written observations on the validity of the data collected; include obvious difficulties encountered by respondees in using the data collection tool(s)

13. Work with mid level staff to perform additional statistical analyses as detailed by the project director

14. Work with mid level staff to prepare charts/graphs of data findings

15. Arrange for and conduct interviews to collect non-numeric data, as required

ACTIVITIES

RESEARCH, ANALYSIS AND DESIGN — ENTRY LEVEL

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16. Review and document (in written and/or graphic form) information obtained from interviewees; includes preparation of flowcharts of systems, services, etc.

17. Assist mid level staff in the preliminary analysis and evaluation of systems, services, facilities, etc. as outlined by the project director

18. Work with mid level staff to document the preliminary analysis and evaluation

19. Assist mid level staff in the preliminary development/design of systems, facilities, etc. as outlined by the project director

20. Assist mid level staff in the preparation of the detailed design of systems, facilities, etc. following approval/modification of the basic design by the project director, project consultants and the client's representatives

21. Work with mid level staff to draft documentation to support the recommended systems, services, etc.

Other

22. Assist mid level staff in performing all primary data collection and analysis activities required to support marketing, internal research activities, and preparation of proposals and grant applications

23. Keep abreast of developments in the field of data collection and analysis and of new and developing technologies applicable to the field

24. Recommend acquisition of reference works on data collection and analysis for addition to the organization's library

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RESEARCH, ANALYSIS AND DESIGN — MID LEVEL

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25. Coordinate and participate in the development of procedures for data collection and analysis to support a particular project

26. Coordinate and participate in the development of draft survey forms, questionnaires, interview guides and other data collection tools

27. Coordinate and participate in the identification of the sample population, including persons to be interviewed

RESEARCH, ANALYSIS AND DESIGN — MID LEVEL

28. Present the proposed data collection procedures and tools to the project director for review

29. Coordinate and participate if any required revision of data collection procedures and tools

30. Identify and acquire access to statistical software packages available in-house or through a contractor, following review of recommended actions by the project director

31. Coordinate and participate in the development of coding systems to support tabulation and analysis of quantitative data

32. Use and/or supervise use of statistical software packages for computerized analysis of quantitative data

33. Perform, supervise and/or contract for computer programming to support additional processing of data

34. Monitor the training and supervision of data collection and analysis support personnel by entry level staff

35. Monitor the progress of all data collection and analysis activities

36. Resolve minor problems related to data collection, tabulation and analysis; refer major problems to the project director with recommendations for their solution

37. Coordinate and participate in the performance of additional statistical analyses as detailed by the project director

38. Coordinate and participate in the preparation of charts and/or graphs of data findings

39. Review documentation prepared by entry level staff summarizing information obtained from interviewees; recommend clarification and/or revision, as required

40. Coordinate and participate in the preliminary analysis and evaluation of existing systems, services, facilities, etc. as outlined by the project director

41. Coordinate and participate in the documentation of the preliminary analysis and evaluation

42. Coordinate and participate in the preliminary development/design of systems, facilities, etc. as outlined by the project director

RESEARCH, ANALYSIS AND DESIGN — MID LEVEL

43. Coordinate and participate in the evaluation of the relative merit of competing plans/designs by performing cost-benefit analyses and other analyses, as outlined by the project director

44. Coordinate and participate in the preparation of the detailed design of systems, facilities, etc. following approval/modification of the basic design by the project director, project consultants and the client's representatives

45. Coordinate and participate in drafting documentation to support the recommended systems, services, etc.

Other

46. Coordinate and participate in all primary data collection and analysis activities required to support marketing, internal research activities, and preparation of proposals and grant applications

RESEARCH, ANALYSIS AND DESIGN — SENIOR LEVEL

47. At the initial meeting of the project team, identify the basic primary data required to support a particular project

48. Identify potential data sources and data collection methods

49. Review and approve/modify proposed data collection procedures and tools developed by junior staff

50. Identify the statistical analyses which should be performed on the quantitative data to be collected for a particular project

51. Approve/modify recommendations of mid level staff to acquire in-house or contract access to statistical software packages and/or to obtain computer programming support (in-house or under contract) to support additional processing of data

52. Resolve major problems related to data collection, tabulation and analysis as referred by mid level staff

53. Review the results of tabulations and preliminary analyses of quantitative data

54. Identify additional statistical analyses to be performed by junior staff

RESEARCH, ANALYSIS AND DESIGN — SENIOR LEVEL

55. Review the results of the completed tabulations and analyses of quantitative data and assess comments by junior staff on the validity of the data collected

56. Review charts/graphs of data findings and identify changes and/or additions to be made to the charts/graphs

57. Outline the basic requirements for preliminary analysis and evaluation of existing systems, services, facilities, etc. which junior staff should perform

58. Review documentation on the preliminary analyses and evaluations as prepared by junior staff and assess their findings

59. Identify the major problems requiring resolution in the existing system/service, etc. and identify related sub-problems

60. Develop an outline of the basic requirements of the future system, service, facility, etc. which junior staff will develop/design

61. Review and approve/modify the various plans/designs identified and developed by junior staff

62. Develop suitable criteria for judging the relative merit of the various plans/designs, including cost effectiveness of comparable systems

63. Review the evaluations of the various plans/designs prepared by junior staff

64. Select the plan/design which will meet the client's needs, be most cost effective, and be suitable for modification/expansion/upgrading in the future

65. Present the recommended and alternative plans/designs to project consultants and the client's representatives for their review; justify the recommended plan/design

66. Coordinate any revision to the recommended plan/design as suggested by project consultants and/or client's representatives

67. Outline the requirements for preparation of the detailed plan/design by junior staff

68. Review and approve/modify the detailed plan/design developed by junor staff

RESEARCH, ANALYSIS AND DESIGN — SENIOR LEVEL

69. Review all documentation prepared by junior staff describing the data collection procedures and tools, the analyses and evaluations of findings, and the evaluation of the various plans/designs developed; modify and supplement the documentation, as required, for inclusion in project reports

70. Develop mathematical models, if appropriate, for identifying requirements/costs when planning similar systems

71. Develop recommended programs of action for inclusion in the final project report

Other

72. Identify primary data collection and analysis activities required to support marketing, internal research activities, and preparation of proposals and grant applications

RESEARCH, ANALYSIS & DESIGN — ENTRY LEVEL

Basic knowledge

knowledge related to literacy, numeracy, communications, etc.

Subject knowledge

knowledge of the primary subject field of clients served (e.g., librarianship, education, medicine, chemistry, law, etc.)
knowledge of foreign languages

Information Science Knowledge (Generic)

knowledge of definition, structure, and formats of information
knowledge of alternative approaches to the organization of information
knowledge of alternative approaches to retrieval of information
knowledge of alternative approaches to information management
knowledge of available and emerging information technologies and their applications
knowledge of completed and ongoing research in the field and its applicability to practice
knowledge of career opportunities
knowledge of how to learn on an ongoing basis

Knowledge about information work environments

knowledge of the expanding information community, its participants and their interrelationships (social, economic, technical, etc.)
knowledge of the variety of work settings and their organizational structures
knowledge of the functions performed within the various work settings and the services and products offered
knowledge of the users of the services and products, their characteristics and information habits

Knowledge of what work is done

knowledge of the functions related to research, analysis and design of information and information systems, the range of services and products offered (both actual and potential)
knowledge of the goals and objectives of each project
knowledge of the clients' information needs and requirements

RESEARCH, ANALYSIS & DESIGN — ENTRY LEVEL

Knowledge of what work is done (cont'd)

- knowledge of the activities that are required to offer the services and produce the products
- knowledge of the various resources that are necessary to support the activities
- knowledge of research, analysis and design tools
- knowledge of research, analysis and design methods and techniques
- knowledge of job responsibilities
- knowledge of performance expected and how it can be measured

Knowledge of how to do work

- knowledge of how to perform the various activities
- knowledge of how to use the research, analysis and design tools
- knowledge of how to apply the research, analysis and design methods and techniques
- knowledge of public relations techniques

Knowledge of the organization and specific work unit

- knowledge of the mission, goals and objectives of the organization
- knowledge of the structure of the organization and the role of the section within the organization
- knowledge of the various projects and key personnel within the organization
- knowledge of the policies and procedures relevant to the section operations
- knowledge of the various resources available within the organization (e.g. personnel, equipment, etc.)

RESEARCH, ANALYSIS & DESIGN — MID LEVEL

- greater depths of knowledge specified above
- knowledge of the operations of other sections in the organization and how they relate to research, analysis and design
- knowledge of available vendor-supplied systems, services and products to support research, analysis and design
- knowledge of the contracting process, both in general and within the organization
- knowledge of evaluation methods and techniques to evaluate systems, services and products

RESEARCH, ANALYSIS & DESIGN — SENIOR LEVEL

greater depths of knowledge specified above
knowledge of statistical description, analysis, interpretation and presentation
knowledge of the costs associated with resources (materials, personnel, space, etc.)
knowledge of cost analysis and interpretation methods
knowledge of methods of resource allocation
state-of-the-art knowledge of research and practice in techniques for research, analysis and design of information and information systems

RESEARCH, ANALYSIS & DESIGN — ENTRY LEVEL

Basic Skills

literacy, numeracy, cognitive, analytical, communications, etc.

Skills Related to Specific Activities

Ability to:

perform each activity
use computer and telecommunications equipment/systems with ease
use a logical approach to problem analysis and problem solving
establish rapport with colleagues, interviewees and clients
communicate well by written, verbal and non-verbal means
conduct an interview in person or by phone
elicit required data
listen carefully
use computing, mathematical and statistical, and systems analysis techniques for collecting, analyzing and interpreting data
discern questionable data and verify or reject them
make decisions and recommendations based on available information
work independently and in groups
develop criteria for evaluation
make effective, timely, and well-informed decisions
isolate and define problems and develop the necessary criteria and action for their solution
manage time effectively
work under pressure of strict deadlines
endure the stress of irregular work hours during rush periods
stay organized while working on several projects at the same time
extract data and/or techniques which are not environment-specific to one project and use the data and/or techniques to support related projects
supervise staff

RESEARCH, ANALYSIS & DESIGN — MID LEVEL

Skills Related to Each Specific Activity

Skills listed above are developed to a greater extent

Ability to:

identify and define gaps in data
resolve conflicting data
develop criteria to evaluate competing systems
communicate with data processing staff and other support/contract staff on a technical level
arbitrate and negotiate with contractors
conduct meetings with individuals and groups

RESEARCH, ANALYSIS & DESIGN — SENIOR LEVEL

Skills listed above are developed to a greater extent

Ability to:

identify the basic data and analysis required to properly examine a given topic
estimate the costs of collecting, analyzing, evaluating data and designing/recommending solutions for clients' needs
anticipate long-range needs of the section and of the organization
design systems and procedures to improve operations of the section, of the organization, and for clients
apply methods of measurement and evaluation
budget and make projections
optimize the use of organizational and section resources

RESEARCH, ANALYSIS & DESIGN

Dispositional Attitudes

Attitudes Toward Institutions

Respect for profession
Respect for the section
Respect for the parent organization

Attitudes Toward Other People

Toward Users

Respect users
Like people in general
Like to help people
Like to meet people
Like to make others feel comfortable
Sensitive to others' needs

Toward Others in the Workplace

Respect co-workers
Like to work with others/as a team
Like to work on own
Willingness to draw upon and share knowledge and experience with others
Supportive of co-workers
Enjoy managing/supervising others

Personal Qualities

Alertness
Assertiveness
Compassion/Kindness
Confidence
Cheerfulness
Dependability
Determination/Tenacity
Diplomacy
Emotional stability
Fairness
Flexibility/Versatility
Imagination
Inquisitiveness
Leadership ability

RESEARCH, ANALYSIS & DESIGN

Personal Qualities (cont'd)

- Neatness
- Need for achievement
- Objectivity
- Open-mindedness
- Optimism/Positive attitude
- Organization
- Patience
- Physical endurance
- Resourceful
- Sensitive/Thoughtful
- Sense of humor
- Sense of ethics
- Tolerance

Attitudes Related to Job/Work/Organization

Individual should demonstrate:

- Willingness to take/accept responsibility
- Willingness to take initiative
- Willingness to respond to authority, apply and follow policy
- Realization that there is no single "right" way to achieve the goals of the section/organization
- Desire to learn/try
- Willingness to fail
- Willingness to ask questions
- Desire to work to best of ability
- Responsiveness to time constraints
- Accuracy
- Willingness to get hands dirty
- Attention to detail
- Willingness to do clerical tasks
- Desire to follow-through
- Service orientation
- Organizational identity
- Willingness to promote parent organization and its services
- View of parent organization as part of a larger information environment
- Ability to see broad picture
- Ability to sacrifice short-term gains for long-term goals
- Political sense
- Curiosity
- Variety of interests
- Desire to grow personally
- Desire to grow professionally
- Desire to remain current in specific and general subject field
- Positive attitude toward job

INFORMATION SERVICE COMPANY PROFESSIONAL COMPETENCIES

MARKETING

ACTIVITIES

MARKETING	ENTRY LEVEL

1. Attend and participate in brainstorming sessions to identify potential marketing strategies and ideas
2. Assist mid level staff in preparing draft copy for brochures to advertise the services, publications and/or products provided/produced by the organization
3. Identify professional organizations whose membership lists should be obtained for marketing purposes
4. Contact designated sources to obtain information on the requirements for acquiring a copy of their mailing lists for marketing purposes
5. Assist mid level staff in preparing draft copy for press releases on the organization's activities, research findings, personnel and publications and/or products
6. Coordinate mailing press releases to the new editors of designated journals, newsletters, etc.
7. Assist mid level staff in developing the standard "boiler plate" sections of proposals which detail corporate experience, resources, facilities, etc.
8. Recommend topics for inclusion in the organization's newsletter
9. Prepare preliminary copy for the organization's newsletter as assigned by mid level staff
10. Coordinate mailing samples of new publications to the editors of designated journals, reference guides, etc. in the appropriate subject fields
11. Recommend attention-getting themes for paid advertisements
12. Assist mid level staff in preparing draft copy for paid advertisements
13. Proofread galleys of marketing documents as assigned
14. Prepare a list of publications/products produced by the organization for inclusion in/with new publications/products and for distribution at exhibits
15. Assist mid level staff in developing a plan for the organization's exhibit at professional meetings and conferences
16. Staff the organization's exhibit during assigned time periods

MARKETING — ENTRY LEVEL

17. Answer exhibit viewers' questions about the organization; refer appropriate questions to higher level staff for response

18. Attend local, national, and international professional meetings and conferences to maintain the visibility of the organization, to discover areas of interest to potential clients, to maintain professional contacts, and to gain up-to-date information on developments, technologies, systems, services, experts, consultants, competitors, etc. in the information field

19. Participate in committee work for professional organizations in the information field

20. Attend and participate in meetings with potential clients as indicated by senior staff

21. Attend and participate in seminars, workshops, presentations, etc. which describe the organization and its services/products

22. Keep abreast of activities of competing companies in the information field and of the market conditions for information service; prepare summary reports for in-house distribution

MARKETING — MID LEVEL

23. Prepare a detailed outline of information to be presented in paid advertisements, brochures, exhibits, etc. to advertise the services, publications and/or products provided/produced by the organization

24. Prepare draft copy for advertisements, brochures, exhibits, etc.; review and approve/modify any copy prepared by entry level staff

25. Present the draft copy with preliminary ideas for artwork to senior staff for review

26. Arrange for and coordinate the support activities of photographers and graphic designers/artists in planning the layout and illustrations for paid advertisements, brochures, exhibits, etc.

27. Arrange for the purchase of advertising space in appropriate journals, etc.

28. Coordinate and participate in the writing and layout of the organization's newsletter at specified intervals

MARKETING — MID LEVEL

29. Coordinate the proofreading of the galleys by staff

30. Present the galleys to senior staff for review

31. Arrange for and coordinate the support activities of printers, video cameramen, etc.

32. Coordinate and participate in drafting press releases on the organization's activities, research findings, personnel, and publications and/or products

33. Prepare a draft listing of news editors who should receive the organization's press releases

34. Coordinate and participate in the writing of the standard "boiler plate" sections of proposals which detail corporate experience, resources, facilities, etc.

35. Prepare a draft listing of editors of journals, reference guides, etc. who should receive sample copies of new publications produced by the organization

36. Plan and make arrangements for display of the organization's exhibit at appropriate professional meetings and conferences

37. Develop a draft plan for staffing the exhibits

38. Respond to the more difficult questions posed by exhibit viewers as referred by entry level staff

39. Prepare detailed plans and coordinate all arrangements for presentation of seminars, workshops, lectures, etc. which describe the organization and its services/products

MARKETING — SENIOR LEVEL

40. Work with management of the organization to identify the purpose and objectives of the organization's marketing program

41. Conduct brainstorming sessions with junior staff to identify potential marketing strategies and ideas

42. Develop a marketing plan and establish a budget for each of the organization's publications, products, services, etc.

MARKETING — SENIOR LEVEL

43. Prepare a basic outline of information to be presented in each marketing tool

44. Review and approve/modify all marketing materials before production

45. Review and approve/modify all distribution plans for marketing materials as developed by junior staff

46. Outline information to be gathered, tabulated, and analyzed by data collected staff in order to measure the effectiveness of the organization's various marketing strategies and to obtain feedback from clients and users of services/products on their degree of satisfaction with the organization's services/products

47. Analyze results of findings of marketing research and recommend to management appropriate changes in marketing strategies and in services/products to clients/users

48. Review and analyze market conditions and trends in the information service field and forecast the volume of demand for its services/products the organization can expect over a definite period in the future

49. Recommend to management areas in which the organization should expand its expertise, services, products, etc. in order to potentially generate more business activity

50. Represent the organization at professional meetings, conferences, etc.

51. Maintain close liaison with system vendors, publishers, experts, consultants, potential clients, etc.

52. Arrange for and conduct meetings (formal and informal) with potential clients in order to explore possibilities for future service/support

53. Prepare the basic plan for and conduct seminars, workshops, lectures, etc. which describe the organization and its services/proudcts; assign junior staff to participate as appropriate

MARKETING — ENTRY LEVEL

Basic knowledge

knowledge related to literacy, numeracy, communications, etc.

Subject knowledges

knowledge of the primary subject field of clients served (e.g., librarianship, education, medicine, chemistry, law, etc.)
knowledge of foreign languages

Information Science Knowledge (Generic)

knowledge of definition, structure, and formats of information
knowledge of alternative approaches to the organization of information
knowledge of alternative approaches to retrieval of information
knowledge of alternative approaches to information management
knowledge of available and emerging information technologies and their applications
knowledge of completed and ongoing research in the field and its applicability to practice
knowledge of career opportunities
knowledge of how to learn on an ongoing basis

Knowledge about information work environments

knowledge of the expanding information community, its participants and their interrelationships (social, economic, technical, etc.)
knowledge of the variety of work settings and their organizational structures
knowledge of the functions performed within the various work settings and the services and products offered
knowledge of the users of the services and products, their characteristics and information habits
knowledge of the requirements and demands of the marketplace for the research, analysis and design services provided by the organization and similar organizations
knowledge of the benefits experienced by clients who have used the services/ products produced by the organizations
knowledge of the benefits experienced by users of the services/products of competing organizations
knowledge of the satisfaction levels experienced by users of the organization's services/products
knowledge of satisfaction levels experienced by users of the services/ products of competing organizations

MARKETING — ENTRY LEVEL

Knowledge of what work is done

- knowledge of the general functions related to research, analysis and design of information and information systems
- knowledge of the marketing functions, the range of services and products offered (both actual and potential)
- knowledge of the activities that are required to offer the services and produce the products
- knowledge of the various resources that are necessary to support the activities
- knowledge of marketing tools
- knowledge of marketing methods and techniques, including selling methods and techniques
- knowledge of public relations methods and techniques
- knowledge of business methods and techniques
- knowledge of job responsibilities
- knowledge of performance expected and how it can be measured

Knowledge of how to do work

- knowledge of how to perform the various activities
- knowledge of how to use the marketing tools
- knowledge of how to apply the marketing methods and techniques

Knowledge of the organization and specific work unit

- knowledge of the mission, goals and objectives of the organization
- knowledge of the structure of the organization and the role of the section within the organization
- knowledge of the various projects and key personnel within the organization
- knowledge of the policies and procedures relevant to section operations
- knowledge of the various resources available within the organization (e.g. personnel, equipment, etc.)
- knowledge of specific and generic services and products produced by the organization

MARKETING — MID LEVEL

greater depths of knowledge specified above
knowledge of the operations of other sections in the organization and how they relate to marketing
knowledge of available vendor-supplied systems, services and products to support marketing
knowledge of the appropriate media sources and services to utilize to support the organization's marketing program
knowledge of the contracting process, both in general and within the organization
knowledge of evaluation methods and techniques to evaluate systems, services and products

MARKETING — SENIOR LEVEL

greater depths of knowledge specified above
knowledge of statistical description, analysis, interpretation and presentation
knowledge of the costs associated with resources (materials, personnel, space, etc.)
knowledge of cost analysis and interpretation methods
knowledge of methods of resource allocation
state-of-the-art knowledge of research and practice in marketing techniques

ENTRY LEVEL

Basic Skills

literacy, numeracy, cognitive, analytical, communications, etc.

Skills Related to Specific Activities

Ability to:

perform each activity
use/interface with users of microcomputer, computer, telecommunications and other new equipment technologies
perceive the service/product needs of potential clients
establish rapport with colleagues, clients (actual and potential), and appropriate media personnel
communicate well by written, verbal and non-verbal means
sell the organization and its products/ services
demonstrate business sense
listen carefully
think and argue logically
think quickly in response to questions
project a winning attitude
collect, analyze and interpret data
make decisions and recommendations based on available information
work independently and in groups
develop criteria for evaluation of services/products
make effective, timely, and well-informed decisions
isolate and define problems and develop the necessary criteria and action for their solution
manage time effectively
work under pressure of strict deadlines
stay organized while working on several projects at the same time
endure the stress of traveling and irregular work hours, when necessary
supervise staff

MID LEVEL

Skills Related to Each Specific Activity

Skills listed above are developed to a greater extent

Ability to:

communicate with media production staff/contractors on a technical level
arbitrate and negotiate with contractors
conduct meetings with individuals and groups

SENIOR LEVEL

Skills listed above are developed to a greater extent

Ability to:

develop marketing plans and strategies that produce an increase in business for the organization
anticipate future needs in the marketplace
elicit creative ideas from marketing staff
anticipate long-range needs of the section and of the organization
design systems and procedures to improve operations of the section and of the organization
apply methods of measurement and evaluation
budget and make projections
optimize the use of organizational and section resources

ATTITUDES

MARKETING

Dispositional Attitudes

Attitudes Toward Institutions

Respect for profession
Respect for the section
Respect for the parent organization

Attitudes Toward Other People

Toward Users

Respect users
Like people in general
Like to help people
Like to meet people
Like to make others feel comfortable
Sensitive to others' needs

Toward Others in the Workplace

Respect co-workers
Like to work with others/as a team
Like to work on own
Willingness to draw upon and share knowledge and experience with others
Supportive of co-workers
Enjoy managing/supervising others

Personal Qualities

Alertness
Assertiveness
Compassion/Kindness
Confidence
Cheerfulness
Dependability
Determination/Tenacity
Diplomacy
Emotional stability
Fairness
Flexability/Versatility
Imagination
Inquisitiveness
Leadership ability
Neatness
Need for achievement

MARKETING

Personal Qualities (cont'd)

- Objectivity
- Open-mindedness
- Optimism/Positive attitude
- Organization
- Patience
- Physical endurance
- Resourceful
- Sensitive/Thoughtful
- Sense of humor
- Sense of ethics
- Tolerance

Attitudes Related to Job/Work/Organization

Individual should demonstrate:

- Willingness to take/accept responsibility
- Willingness to take initiative
- Willingess to respond to authority, apply and follow policy
- Realization that there is no single "right" way to achieve the goals of the section/organization
- Desire to learn/try
- Willingness to fail
- Willingness to ask questions
- Desire to work to best of ability
- Responsiveness to time constraints
- Accuracy
- Willingness to get hands dirty
- Attention to detail
- Willingness to do clerical tasks
- Desire to follow-through
- Service orientation
- Organizational identity
- Willingness to promote parent organization and its services
- View of parent organization as part of a larger information environment
- Ability to see broad picture
- Ability to sacrifice short-term gains for long-term goals
- Political sense
- Curiosity
- Variety of interests
- Desire to grow personally
- Desire to grow professionally
- Desire to remain current in specific and general subject field
- Positive attitude toward job

INFORMATION SERVICE COMPANY PROFESSIONAL COMPETENCIES

ORGANIZATION/MANAGEMENT SUPPORT

ACTIVITIES

ORGANIZATION/MANAGEMENT SUPPORT	ENTRY LEVEL

1. Identify materials to be included in section, master organization and personal files
2. Recommend purchase of professional publications/audiovisuals for inclusion in the staff library
3. Perform special studies, as assigned
4. Conduct business by phone, whenever appropriate
5. Write memos, letters, reports, etc. as required
6. Maintain a record of work performed and prepare a monthly report of activities
7. Prepare manuals of procedures
8. Make recommendations to the section manager for improvement in operations of the section
9. Attend and participate in staff meetings
10. Provide an overview of the operations of the section to visitors, as requested
11. Supervise technicians and other paraprofessional staff
12. Work to develop "esprit de corps" among staff supervised
13. Assist section manager in writing job descriptions for self and for staff supervised
14. Assist section manager in developing performance standards for self and for staff supervised
15. Assist section manager in the review and performance evaluation of staff supervised
16. Assist in the selection of new technicians and paraprofessionals
17. Keep abreast of developments and new and developing technologies in the information field and in related fields, as required
18. Attend professional meetings and prepare reports for dissemination to staff
19. Develop professional contacts both within and outside the parent organization

ACTIVITIES

ORGANIZATION/MANAGEMENT SUPPORT	MID LEVEL

20. Make preliminary selection of forms and/or develop draft record formats for files and operations, as appropriate

21. Weed section files, as assigned

22. Identify and evaluate commercially available systems/services to support section/organization activities

23. Assess performance of existing equipment/systems/services used in the section/organization and investigate capabilities of other equipment/systems/services

24. Recommend acquisition of new/additional equipment/systems/services

25. Train staff in operation and in-house maintenance of equipment/systems/services

26. Supervise in-house operation and maintenance of equipment/systems/services

27. Gather information for maintenance contracts on equipment/systems

28. Draft statements of work for contract proposals for services, systems, equipment and/or maintenance

29. Evaluate contractors' proposals

30. Act as contract monitor/technical representative, as assigned

31. Train and supervise entry level staff

32. Assist in the selection of new professional staff

33. Write articles for professional journals/newsletters when appropriate

ORGANIZATION/MANAGEMENT SUPPORT	SENIOR LEVEL

34. Review and dispose of materials/information selected for weeding/deletion from section files

35. Draft section procedures and policies; draft revisions as required

36. Flowchart and document section procedures

ACTIVITIES

ORGANIZATION/MANAGEMENT SUPPORT	SENIOR LEVEL

37. Assist section manager in on-going systems analysis of the section

38. Analyze statistics of section operations and prepare draft statistical reports

39. Train and supervise mid level staff

40. Assist section manager in preparing the annual budget for section operations

41. Function as section manager in his/her absence

42. Represent the section/organization at meetings, etc., as assigned

ORGANIZATION/MANAGEMENT SUPPORT — ENTRY LEVEL

Basic knowledge

knowledge related to literacy, numeracy, communications, etc.

Subject knowledge

knowledge of the primary subject field of clients served (e.g., librarianship, education, medicine, chemistry, law, etc.)
knowledge of foreign languages

Information Science Knowledge (Generic)

knowledge of definition, structure, and formats of information
knowledge of alternative approaches to the organization of information
knowledge of alternative approaches to retrieval of information
knowledge of alternative approaches to information management
knowledge of available and emerging information technologies and their applications
knowledge of completed and ongoing research in the field and its applicability to practice
knowledge of career opportunities
knowledge of how to learn on an ongoing basis

Knowledge about information work environments

knowledge of the expanding information community, its participants and their interrelationships (social, economic, technical, etc.)
knowledge of the variety of work settings and their organizational structures
knowledge of the functions performed within the various work settings and the services and products offered
knowledge of the users of the services and products, their characteristics and information habits

Knowledge of what work is done

knowledge of the functions required to support section/organizational operations and management
knowledge of the activities that are required to offer the services and produce the products
knowledge of the various resources that are necessary to support the activities
knowledge of tools for training, supervising, and evaluating staff
knowledge of tools for supporting section/organizational operations and management

ORGANIZATION/MANAGEMENT SUPPORT — ENTRY LEVEL

Knowledge of what work is done (cont'd)

- knowledge of methods and techniques for supporting section/organization operations and management
- knowledge of job responsibilities and working conditions (e.g., range of duties, probable compensation benefits, etc.)
- knowledge of performance expected and how it can be measured

Knowledge of how to do work

- knowledge of how to perform the various activities
- knowledge of how to use the tools for training, supervising, and evaluating staff
- knowledge of how to use the tools for supporting section/organizational operations and management
- knowledge of how to apply the methods and techniques for training, supervising, and evaluating staff
- knowledge of how to apply the methods and techniques for supporting section/organizational operations and management
- knowledge of personnel procedures
- Knowledge of standards, measures, and methods for evaluating personnel

Knowledge of the organization and specific work unit

- knowledge of the mission, goals and objectives of the organization
- knowledge of the structure of the organization and the role of one's section within the organization
- knowledge of the various projects and key personnel within the organization
- knowledge of the policies and procedures relevant to operations of one's section
- knowledge of the various resources available within the organization (e.g. personnel, equipment, etc.)
- knowledge of in-house information needs and requirements

ORGANIZATION/MANAGEMENT SUPPORT — MID LEVEL

greater depths of knowledge specified above
knowledge of the operations of other sections in the organization and how they relate to one's own section
knowledge of available vendor-supplied systems, services and products to support section/organizational operations and supervision/management
knowledge of the contracting process, both in general and within the organization
knowledge of evaluation methods and techniques to evaluate systems, services and products
knowledge of quality and production control techniques and procedures

ORGANIZATION/MANAGEMENT SUPPORT — SENIOR LEVEL

greater depths of knowledge specified above
knowledge of statistical description, analysis, interpretation and presentation
knowledge of the costs associated with resources (materials, personnel, space, etc.)
knowledge of cost analysis and interpretation methods
knowledge of methods of resource allocation
knowledge of alternative management structures and their implications for the operation of the section
state-of-the-art knowledge of research and practice in techniques for training, supervising, and evaluating staff
state-of-the-art knowledge of research and practice in techniques for supporting section/organizational operations and management

SKILLS

ORGANIZATION/MANAGEMENT SUPPORT — ENTRY LEVEL

Basic Skills

literacy, numeracy, cognitive, analytical, communications, etc.

Skills Related to Specific Activities

Ability to:

perform each activity
perceive the information needs of section staff and management
communicate well by written, verbal and non-verbal means
listen carefully
think and argue logically
think quickly in response to questions
project a positive attitude about the activities of the section/organization
make decisions and recommendations based on available information
work independently and in groups
develop criteria for evaluation
make effective, timely, and well-informed decisions
isolate and define problems and develop the necessary criteria and action for their solution
manage time effectively
conduct an interview
train staff
supervise staff
establish rapport with colleagues and with staff supervised
develop "espirt de corps" among staff supervised
conduct meetings with individuals and with groups
resolve conflicts among staff

ORGANIZATION/MANAGEMENT SUPPORT — MID LEVEL

Skills Related to Each Specific Activity

Skills listed above are developed to a greater extent

Ability to:

perceive the needs of the organization and not just of the section
understand the operation and maintenance requirements of equipment/systems/services used in the section/organization
write and evaluate contract-related documentation
communicate with data processing staff and various contractors on a technical level
arbitrate and negotiate with contractors

ORGANIZATION/MANAGEMENT SUPPORT — SENIOR LEVEL

Skills listed above are developed to a greater extent

Ability to:

anticipate long-range needs of the section and of the organization
design systems and procedures to improve operations of the section and of the organization
apply methods of measurement and evaluation
budget and make projections
optimize the use of organizational and section resources

ATTITUDES

ORGANIZATION/MANAGEMENT SUPPORT

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Assertiveness
Compassion/Kindness
Confidence
Cheerfulness
Dependability
Determination/Tenacity
Diplomacy
Emotional stability
Fairness
Flexibility/Versatility
Imagination
Inquisitiveness
Leadership ability

Personal Qualities (cont'd)

Neatness
Need for achievement
Objectivity
Open-mindedness
Optimism/Positive attitude
Organization
Patience
Physical endurance
Resourceful
Sensitive/Thoughtful
Sense of humor
Sense of ethics
Tolerance

Attitudes Related to Job/Work/Organization

Individual should demonstrate:

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Willingness to fail
Willingness to ask questions
Desire to work to best of ability
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Accuracy
Willingness to get hands dirty
Attention to detail
Willingness to do clerical tasks
Desire to follow-through
Service orientation
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Willingness to promote parent organization and its services
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Ability to see broad picture
Ability to sacrifice short-term gains for long-term goals
Political sense
Curiosity
Variety of interests
Desire to grow personally
Desire to grow professionally
Desire to remain current in specific and general subject field
Positive attitude toward job